

PATENT APPLN. NO. 10/053,915
RESPONSE UNDER 37 C.F.R. §1.111

PATENT
NON-FINAL

IN THE CLAIMS:

1... (currently amended) A needle assembly comprising a hollow needle having a sharp needle tip at a distal end of the needle; a needle hub having a distal end in which the needle is secured and having an inner lumen in communication with the inside of the needle; a needle protector having an elongated rod-shaped main body and a needle tip protection part, said needle tip protection part being a tubular cylindrical member provided on a distal end of said main body for sliding on the needle; a cylindrical needle hub cover provided on the distal end of the needle hub and having an inner channel accommodating for accommodating the needle and the needle tip protection part therein at the inside and provided on the distal end of the needle hub; the needle hub and the needle hub cover each having such a shape as to form a side hole providing communication between the outside of said assembly and the inner channel of the needle hub cover when the needle hub and the needle hub cover are joined; wherein said main body of the protector is positioned in said side hole and is movable along the needle toward the distal end or the proximal end of the needle.

2. (original) A needle assembly according to claim 1, wherein the needle protector is movable from a position where said

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needle tip protection part is arranged in the inner channel of the needle hub cover before protection of the needle tip to a position where the needle tip is accommodated in the needle tip protection part for protecting the needle tip.

3. (original) A needle assembly according to claim 2, wherein said assembly includes a first positioning means for positioning and maintaining the protector in a position where the needle tip protection part is arranged in the inner channel of the needle hub cover before the needle tip is protected.

4. (original) A needle assembly according to claim 3, wherein the first positioning means is a means for engaging the distal end portion of the needle hub with the needle tip protection part of the protector.

5. (original) A needle assembly according to claim 4, wherein the first positioning means comprises a projecting portion or a depressed portion provided on an outer surface of the needle hub and a depressed portion or a projecting portion provided on an inner surface of the needle tip protection part of the protector for engaging with said projecting portion or said depressed

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portion, respectively, provided on the other surface of the needle hub.

6. (original) A needle assembly according to claim 2, wherein said assembly includes a second positioning means for positioning and maintaining the protector in a position where the needle tip is accommodated in the needle tip protection part when the needle tip is protected.

7. (original) A needle assembly according to claim 6, wherein the second positioning means comprises a means for engaging a proximal end portion of the protector with the needle hub cover.

8. (original) A needle assembly according to claim 6, wherein the second positioning means comprises an engaging arm provided on the distal end portion of the protector for engaging with a side hole forming portion of the needle hub cover to prevent the protector from moving toward a distal end of said assembly, and a projection provided on the distal end portion of said engaging arm of the protector and projecting inwardly for engaging with a distal end portion of the needle hub cover to prevent the protector from moving toward a proximal end of said assembly.

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9. (original) A needle assembly according to claim 1, wherein a projecting portion or a depressed portion is provided on an outer surface of the distal end of the needle hub, a depressed portion or a projecting portion is provided on an inner surface of the needle tip protection part of the protector for engaging said projecting portion or the depressed portion, respectively, on the outer surface of the needle hub, an engaging arm is provided on a proximal end portion of the protector for engaging a side hole forming portion of the needle hub cover, and a projection is provided on a distal end portion of the engaging arm and is projected inwardly toward the needle hub cover for engaging the distal end portion of the needle hub cover.

10. (original) A needle assembly according to claim 1, wherein a cap for protecting the needle tip is removably provided on said needle hub.

11. (new) A needle assembly according to claim 1, wherein said needle protector is formed of a thermoplastic material having moderate flexibility.

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12. (new) A needle assembly according to claim 11,
wherein said thermoplastic material having moderate flexibility is
selected from the group consisting of polypropylene, polycarbonate,
acrylonitrile-butadiene-styrene copolymer, polystyrene,
polyethylene, and polyacetal.